

EDocket No.: 043876-0148 **PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of

Customer Number: 20277

Craig HANSEN, et al.

Confirmation Number: 9134

Application No.: 10/712,430

Group Art Unit: 2183

Filed: November 14, 2003

Examiner: Unknown

For: SYSTEM AND SOFTWARE FOR CATENATED GROUP SHIFT INSTRUCTION

### SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

Applicants are submitting to the Office a single paper copy of each of the documents listed on the attached form PTO-1449 in connection with a corresponding Supplemental Information Disclosure Statement filing for U.S. Patent Application No. 10/418,113. Applicants are separately filing a Petition requesting waiver of Rules 1.4(b) and 98(a)(2), which requires copies of the documents listed on the attached form PTO-1449 to be provided herewith. In view of the Office's practice of scanning documents into the Image File Wrapper, it is believed that providing a single set of paper copies will enable the Office to process the papers efficiently and expedite the

## 10/712,430

Examiner's consideration of the same. Furthermore, the attached form PTO-1449 includes citations to some materials for which it is difficult to obtain additional copies. In view of the Petition and in the interests of efficiency, Applicants' respectfully request that a copy of each of the cited documents be made of record in the present application.

This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.

Applicants bring to the Examiner's attention the following pending applications of Craig C.

Hansen et al., which may include subject matter related to the present application:

Application Number	Title			
10/418,113	Multiplier Array Processing System With Enhanced Utilization At Lower Precision			
10/436,340	System With Wide Operand Architecture, And Method			
10/616,303	Programmable Processor And Method With Wide Operations			
10/646,787	Method And Software For Partitioned Group Element Selection Operation			
10/705,946	Programmable Processor And Method For Partitioned Group Shift			
10/716,561	Programmable Processor And Method For Matched Aligned And Unaligned Storage Instructions			
10/716,568	System And Software For Matched Aligned And Unaligned Storage Instructions			
10/757,515	Method And Software For Multithreaded Processor With Partitioned Operations			
10/757,516	Programmable Processor And System For Store Multiplex Operation			
10/757,524	Programmable Processor And For Partitioned Group Element Selection Operation			
10/757,836	Programmable Processor And System For Partitioned Floating-Point Multiply-Add Operation.			

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10/757,851	Method And Software For Partitioned Floating-Point Multiply-Add Operations
10/757,866	Method And Software For Store Multiplex Operation
10/757,925	Method And Software For Partitioned Group Element Selection Operation
10/757,939	Multithreaded Programmable Processor And System With Partitioned Operations

The attached form PTO-1449 includes (but is not exclusively limited to) documents that were cited in on-going litigation proceedings between the assignee of the present application, Dell Inc. and Intel Corp. (U.S. District Court for the Eastern District of Texas, Marshall Division (Civil Action No. 2:04-CV-120(TJW)). This litigation involves seven patents that are in the same family as each of the above applications.

Additionally, some documents were cited in related foreign applications. A copy of the foreign search report or office action is attached for the Examiner's information.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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Reserved Eman

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Facsimile: 202.756.8087 **Date: June 10, 2005** 

Please recognize our Customer No. 20277 as our correspondence address.

SHEET <u>1</u> OF <u>11</u>

# INFORMATION DISCLOSURE CITATION IN AN **APPLICATION**

ATTY. DOCKET NO. 043876-0148

SERIAL NO. 10/712,430

**APPLICANT** 

HANSEN, C., et al.

(PTO-1449)

FILING DATE

**GROUP** 

November 14, 2003 | 2183

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		Document Number Publica Number-Kind Code <sub>2 (H known)</sub> MM-D				Pages, Columns, Lines, Where Relevant Passages or Relevan Figures Appear			
		US	4,658,349 A	05/14/1987	Gafken				
		US	4,852,098	07/25/1989	Brechard et al.				
	I	US	4,875,161	10/17/1989	Lahti				
		US	4,949,294	08/14/1990	Wambergue				
		US	4,953,073	08/28/1990	Moussouris et a	11.			
	]	US	4,959,779	09/25/1990	Weber et al.				
		US	5,113,506	05/12/1992	Moussouris et a	-			
		US	5,161,247	11/3/1992	Murakami et al				
		US	5,208,914	05/04/1993	Wilson et al.				
		US	5,231,646	07/27/1993	Health et al				
****	<u> </u>	US	5,233,690	08/03/1993	Shelock et al.				
		us	5,268,995	12/07/1993	Diefendorff et a				
	ļ	US	5,347,643 A	09/13/1994	Kondo Nobukazu e				
	ļ	US	5,412,728 a	05/03/1995	Besnard Christian				
		US	5,430,660 A	07/04/1995	John Hengeveld e	t al.		<u> </u>	
	ļ	US	5,471,628	11/28/1995	Phillips et al.				
		US	5,515,520	05/07/1996	Hatta et al.				
<u> </u>	ļ	US	5,533,185	07/02/1996	Lentz et al.				
	ļ	US	5,590,365	12/31/1996	lde et al.				
	<u> </u>	US	5,636,351	06/03/1997	Lee				
		US	5,742,840	04/21/1998	Hansen et al.				
	ļ	US	5,778,412 A	07/07/1998	Gafken				
	ļ	US	5,828,869	10/27/1998	Johnson et al.				
-	<u> </u>	US	5,996,057	11/30/1999	Scales, III et al				
		US	6,453,368 B2	09/17/2002	Yamamoto				
	ļ	US	6,657,908 B1	05/20/2003	Furuhashi ENT DOCUMENTS				
EXAMINER'S Foreign Patent Document Pu		Publication Date			ne Linee	т,	anslation		
INITIALS	CITE NO.	Country Codes - Number 4 - Kind Codes (if known)		MM-DD-YYYY	Applicant of Cited Document Where Rel		evant	Yes	No
	Ì		JP 3268024	11/28/1991	Hitachi Ltd.				
			EP 0 468 820 A2	01/29/1992	Fujitsu Limited				
		WO 93/01565		01/21/1993	Seiko Epson Corporation				
		CA 1 323 451		10/19/1993	Northern Telecom Ltd.				
		JP 6095843		04/08/1994	IBM				
		EP 0 651 321 A		05/03/1995	Advanced Micro Devices Inc.				
		EP 0 654 733 A1		05/24/1995	Hewlett-Packard				
			JP-S60-217435	10/31/1985	Toshiba Corp.	_			
			WO 97/07450	02/27/1997	Microunity Systems Engineering, Inc.				
		FX	AMINER			DATE CONSID	FRED		

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

#### SERIAL NO. INFORMATION DISCLOSURE ATTY, DOCKET NO. 10/712,430 043876-0148 CITATION IN AN **APPLICATION** APPLICANT HANSEN, C., et al. FILING DATE **GROUP** (PTO-1449) 2183 November 14, 2003 OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, **EXAMINER'S** INITIALS journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where CITE NO Ide, et al., "A 320-MFLOPS CMOS Floating-point Processing Unit for Superscalar Processors," p. 12-21, 28 March 1993, IEEE J. OF SOLID-STATE CIRCUITS. K. Uchiyama et al., The Gmicro/500 Superscalar Microprocessor with. Branch Buffers, IEEE Micro, October 1993, p. 12-21. L-3 Ruby B. Lee, Realtime MPEG Video Via Software Decompression on a PA-RISC Processor, IEEE (1995). 1-4 Karl M. Guttag et al. "The TMS34010: An Embedded Microprocessor", IEEE June 1988, p. 186-190. M. Awaga et al., "The μVP 64-bit Vector Coprocessor: A New Implementation of High-Performance Numerical Computation", IEEE Micro, Vol. 13, No. 5, October 1993, p.24-36. L-6 Tom Asprey et al., "Performance Features of the PA7100 Microprocessor", IEEE Micro (June 1993), p. 22-35. L-7 Gove, Robert J., "The MVP: A Highly-Integrated Video Compression Chip," IEEE Data Compression Conf., March (1994), pp. 215-224. Woobin Lee, et al., "Mediastation 5000: Integrating Video and Audio," IEEE Multimedia, 1994, L-8 pp. 50-61. L-9 Karl, Guttag et. al "A Single-Chip Multiprocessor for Multimedia: The MVP." IEEE Computer Graphics & Applications, November, 1992, p. 53-64. L-10 TMS32OC8O (MVP) Master Processor User's Guide, Texas Instruments, March, 1995, p. 1-33. L-11 TMS320C80 (MVP) Parallel Processor User's Guide ["PP"]; Texas Instruments March 1995, p. L-12 Shipnes, Julie, "Graphics Processing with the 88110 RISC Microprocessor," IEEE COMPCOM, (Spring, 1992) pp. 169-174. L-13 ILLIAC IV: Systems Characteristics and Programming Manual, May 1, 1972, p. 1-78. N. Abel et al., ILLIAC IV Doc. No. 233, "Language Specifications for a Fortran-Like Higher Level Language for ILLIAV IV, August 28, 1970, p. 1-51. L-15 ILLIAC IV Quarterly Progress Report: October, November, December 1969; Published January 15, 1970, pp. 1-15. L-16 N.E. Abel et al., Extensions to Fortran for Array Processing (1970) pp. 1-16. **EXAMINER** DATE CONSIDERED

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EXAMINER'S INITIALS	CITE NO.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
	L-70	"Control Data 6400/6500/ 6600 Computer Systems, SCOPE Reference Manual, September1966.					
	L-71	"Control Data 6400/6500/ 6600 Computer Systems, COMPASS Reference Manual, 1969.					
	L-72	Tolmie, Don, "Gigabit LAN Issues: HIPPI, Fibre Channel, or ATM?" Los Alamos National Laboratory Rep. No. LA-UR 94-3994 (1994).					
	L-73	ILLIAC IV: Systems Characteristics a	nd Programming Manual, May	1, 1972.			
	L-74	1979 Annual Report: The S-1 Project Vol. 1 Architecture 1979.					
	L-75	1979 Annual Report: The S-1 Project Vol.2 Hardware 1979.					
	L-76	S-1 Uniprocessor Architecture, April 21, 1983 (UCID 19782) See also S-1 Uniprocessor Architecture (SMA-4), Steven Cornell;					
	L-77	Broughton, et al., The S-1 Project: Top-End Computer Systems for National Security Applications, October 24, 1985.					
	L-78	Convex Data Sheet C4/XA High Performance Programming Environment, Convex Computer Corporation.					
	L-79	Bowers et al., "Development of a Low-Cost, High Performance, Multiuser Business Server System," Hewlett-Packard J. Apr. 1995 p. 79-84.					
	L-80	Mick Bass et al., "The PA 7100LC Microprocessor: A Case Study of Design Decisions in a Competitive Environment Hewlett-Packard J. April 1995, p. 12-18.					
	L-81	Mick Bass, et. al. "Design Methodologies for the PA 7100LC Microprocessor", Hewlett Packard Journal April 1995 p. 23-35.					
	L-82	Wang, Chin-Liang, "Bit-Level Systolic Array for Fast Exponentiation in GF (2Am)," IEEE Transactions on Computers, Vol. 43, No. 7, July, 1994 p. 838-841.					
	L-83	Markstein, P.W., "Computation of Elementary Functions on the IBM RISC System/6000 Processor," IBM J. Res. Develop., Vol. 34, No. 1, Jan. 1990 p. 111-119.					
	L-84	Donovan, Walt, et al., "Pixel Processing in a Memory Controller," IEEE Computer Graphics and Applications, January, 1995 p. 51-61.					
	U-85 Ware et al., 64 Bit Monolithic Floating Point Processors, IEEE Journal Of Solid-state Circuits, Vol. Sc-17, No. 5, October 1982, pp. 898-907.						
	L-86 Hwang, "Advanced Computer Architecture: Parallelism, Scalability, Programmability" (1 993) at 475, p. 898-907.						
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#### SERIAL NO. INFORMATION DISCLOSURE ATTY. DOCKET NO. 10/712,430 043876-0148 CITATION IN AN APPLICATION APPLICANT HANSEN, C., et al. FILING DATE **GROUP** (PTO-1449) 2183 November 14, 2003 OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, **EXAMINER'S** INITIALS journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where CITE L-87 Hwang & Degroot, "Parallel Processing for Supercomputers & Artificial Intelligence," 1993. L-88 Nienhaus, Harry A., "A Fast Square Rooter Combining Algorithmic and Table Lookup Techniques," IEEE Proceedings Southeastcon, 1989 pp 1103-1105. L-89 Eisig, David, et al., "The Design of a 64-Bit Integer Multiplier/Divider Unit," IEEE 1993 pp 171-178. L-90 Margulis, Neal, "i860 Microprocessor Architecture," Intel Corporation 1990. L-91 Intel Corporation, 3860 XP Microprocessor Data Book" (May 1991). L-92 Hewlett-Packard, "HP 9000 Series 700 Workstations Technical Reference Manual Model 712 (System)" January 1 994. Ruby Lee, et al., Pathlength Reduction Features in the PA-RISC Architecture Feb. 24-28, 1992 p. 129-135. L-94 Kevin Wadleigh et al., High Performance FFT Algorithms for the Convex C4/XA Supercomputer, Poster, Conference on Supercomputing, Washington, D.C., Nov. 1994. Fields, Scott, "Hunting for Wasted Computing Power: New Software for Computing Networks L-95 Puts Idle PC's to Work," Univ. of Wisconsin- Madison 1993 p. 1-8. Litzkow et al., "Condor - A Hunter of Idle Workstations," IEEE (1988) p. 104-111. Gregory Wilson, The History of the Development of Parallel Computing" http://ei.cs.vt.edu/history/Parallel.html, p. 1-38. 1-98 Marsha Jovanovic and Kimberly Claffy, Computational Science: Advances Through Collaboration" "Network Behavior" San Diego Supercomputer Center 1993 Science Report, p. 1-11 [http://www.sdsc.edu/Publications/SR93/network behavior.html]. L-99 National Science Foundation (NSF) [www.itrd.gov/pubs/blue94/section.4.2.html] 1994. L-100 Intel Corporation, "Paragon User's Guide" (Oct. 1993). Turcotte, Louis H., "A Survey of Software Environments for Exploiting Networked Computing Resources" Engineering Research Center for Computational Field Simulation June 11, 1993, p. 1-150. DATE CONSIDERED **EXAMINER**

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	L-129	"IEEE Draft Standard for High-Bandy	vidth Memory Interface Based or	n SCI Signaling			
		Technology (RamLink)", 1995, pp.1-					
	L-130	Gerry Kane and Joe Heinrich, "MIPS		sher: Prentice-Hall Inc., A			
		Simon & Shuster Company, Upper Sa					
	L-131	CATHY MAY et al. "The Power PC A					
		Processors" Second Edition May 1994		Publishers, Inc. San			
	I 122		Francisco CA, IBM International Business Machines, Inc.				
	L-132	"IEEE Standard for Scalable Coherent Interface (SCI)", Published by the Institute of Electrical					
	L-133	and Electronics Engineers, Inc. August 2, 2003, pp. 1-248.					
	12-133	DON TOLMIE and Don Flanagan, "HIPPI: It's Not Just for Supercomputers Anymore" Data Communications published May 8, 1995.					
	L-136	IEEE Draft Standard for "High-Bandwidth Memory Interface Based on SCI					
	:	Signaling Technology (RamLink)", IEEE Standards Department, Draft 1.25 IEEE P1596.4-199X May 1995.					
	L-137		oprocessor User's Manual Secon	d Edition"1994 MIPS			
		JOE HEINRICH, "MIPS R4000 Microprocessor User's Manual Second Edition" 1994 MIPS Technologies, Inc. pp. 1-754.					
,	L-138	Litigation proceedings in the matter of Microunity Systems Engineering, Inc. v. Dell, Inc. et al.,					
		Corrected Preliminary Invalidity Contentions and Exhibits, filed January 12, 2005, Civil Action					
	ļ	No. 2:04-CV-120(TJW), U.S. District					
	L-139	Ang, StarT Next Generation: Integrating Global Caches and Dataflow Architecture, Proceedings of the ISCA 1992.					
	L-140	Saturn Architecture Specification, published April 29, 1993.					
	L-141	C4/XA Architecture Overview, Convex Technical Marketing presentation dated November 11,					
	L-142	1993 and February 4, 1994.					
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	L-143	IEEE Proceedings published September 1993.					
	L-144	PCT International Search Report and Written Opinion dated March 11, 2005, corresponding to PCT/US04/22126					
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